

Scaled data based on original data using  
LM-79-2019 Approved Method: Electrical and Photometric Measurements of Solid-  
State Lighting Products

Test Report Prepared for  
Cooper Lighting Solutions

Brand: NEO-RAY

Report Number: P1058026

Luminaire Tested: S122RDR-S485D950-X4F0-XX-UDD-SVL-B

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1058026  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2406-143-20)  
Test Lab: INNOVATION CENTER  
Issue Date: 8/7/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S122RDR-S485D950-X4F0-XX-UDD-SVL-B  
Description: DEFINE 2 BLACK REGRESSED DIRECT RECESSED HOUSING WITH SILVER STRAIGHT BLADE LOUVER WITH DIFFUSER  
CORE LIGHT ENGINE  
Light Source: 5000K CCT, 90 CRI LEDS  
Ballast/Driver: -

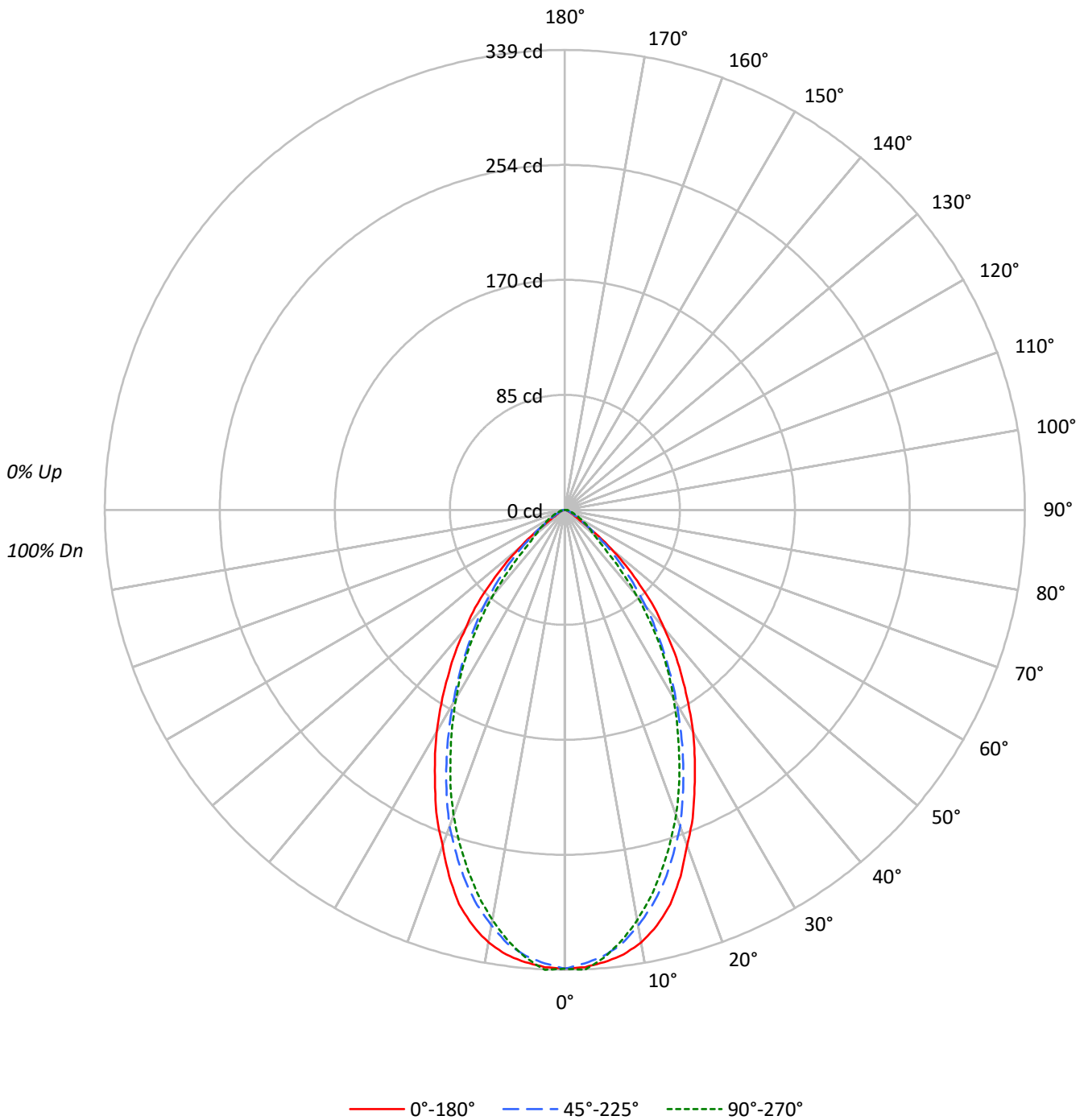
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 363.6 lumens  
Efficiency: N/A  
Efficacy: 18.5 lumens/watt  
Spacing Criteria (0/90/45): 0.93 / 0.85 / 0.91  
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 19.6  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT

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### Luminous Intensity Polar Plot





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**COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:**

RF	20					20					20					20					20	
RC	80					70					50					30					10	0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	0	
RCR																						
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100				
1	113	110	107	104	110	107	105	103	103	101	99	100	98	96	96	95	94	92				
2	106	101	96	92	104	99	95	91	96	92	89	93	90	87	90	87	85	84				
3	100	93	87	82	98	91	86	82	88	84	80	86	82	79	84	81	78	76				
4	94	85	79	74	92	84	78	74	82	77	73	80	76	72	78	74	71	70				
5	88	79	72	68	87	78	72	67	76	71	67	74	70	66	73	69	65	64				
6	83	73	67	62	82	72	66	62	71	65	61	69	64	61	68	64	60	59				
7	79	68	62	57	77	68	61	57	66	60	56	65	60	56	64	59	56	54				
8	74	64	57	53	73	63	57	52	62	56	52	61	56	52	60	55	52	50				
9	70	60	53	49	69	59	53	49	58	52	48	57	52	48	56	52	48	47				
10	67	56	50	45	66	56	49	45	55	49	45	54	49	45	53	48	45	44				

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	6239	6239	6239
5°	6200	6113	6137
10°	6069	5829	5754
15°	5750	5414	5259
20°	5168	4876	4705
25°	4603	4204	4054
30°	4027	3509	3407
35°	3390	2843	2750
40°	2732	2243	1982
45°	2043	1621	1180
50°	1277	1045	775
55°	434	563	631
60°	247	347	498
65°	175	236	384
70°	146	183	291
75°	93	143	242
80°	74	138	213
85°	0	0	148

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 2043 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	31.2	8.6
10°-20°	79.8	21.9
20°-30°	96.1	26.4
30°-40°	82.1	22.6
40°-50°	48.1	13.2
50°-60°	17.4	4.8
60°-70°	6.2	1.7
70°-80°	2.4	0.7
80°-90°	0.4	0.1
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	207.0	56.9
0°-40°	289.0	79.5
0°-60°	354.5	97.5
0°-90°	363.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	363.6	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	338	338	338	338	338	
5°	335	335	330	331	331	32
15°	301	296	283	278	275	84
25°	226	217	206	203	199	104
35°	150	139	126	125	122	94
45°	78	70	62	52	45	60
55°	14	19	18	18	20	17
65°	4	5	5	7	9	4
75°	1	2	2	3	3	2
85°	0	0	0	1	1	0
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	338.1	338.1	338.1	338.1	338.1
2.5°	337.4	338.1	334.7	338.1	339.4
5°	334.7	335.4	330.0	331.3	331.3
7.5°	330.7	330.0	322.6	321.2	320.5
10°	323.9	321.9	311.1	309.1	307.1
12.5°	313.8	309.7	298.3	294.9	292.2
15°	301.0	296.3	283.4	278.0	275.3
17.5°	283.4	278.0	265.9	260.5	257.8
20°	263.2	257.8	248.3	242.3	239.6
22.5°	246.3	237.5	227.4	223.4	220.0
25°	226.1	216.6	206.5	203.1	199.1
27.5°	207.2	195.7	185.6	182.9	179.5
30°	189.0	176.8	164.7	164.7	159.9
32.5°	169.4	157.9	145.1	144.4	141.7
35°	150.5	139.0	126.2	124.8	122.1
37.5°	132.9	121.5	109.3	105.3	101.9
40°	113.4	103.2	93.1	86.4	82.3
42.5°	97.9	86.4	76.3	68.2	62.8
45°	78.3	70.2	62.1	52.0	45.2
47.5°	60.7	55.3	48.6	37.1	33.7
50°	44.5	41.8	36.4	27.7	27.0
52.5°	28.3	29.7	26.3	21.6	23.6
55°	13.5	18.9	17.5	18.2	19.6
57.5°	8.8	9.4	12.8	14.8	16.2
60°	6.7	6.7	9.4	12.1	13.5
62.5°	5.4	5.4	7.4	10.1	10.8
65°	4.0	4.7	5.4	7.4	8.8
67.5°	3.4	3.4	4.0	6.1	6.7
70°	2.7	2.7	3.4	4.7	5.4
72.5°	2.0	2.0	2.7	4.0	4.0
75°	1.3	2.0	2.0	2.7	3.4
77.5°	1.3	1.3	1.3	2.0	2.7
80°	0.7	0.7	1.3	1.3	2.0
82.5°	0.7	0.7	0.7	0.7	1.3
85°	0.0	0.0	0.0	0.7	0.7
87.5°	0.0	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)